

Regular Article

Studies on Medicinal Plants used in Ayurveda, Unani and Siddha Systems of Medicine, available in Tehsil Joginder Nagar

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The present study is the outcome of the survey of medicinal plants conducted in different areas of tehsil Joginder Nagar, District Mandi (H.P.) during April 2012 to December 2013. During the course of study, 100 plant species of 90 genera and 57 families belonging to three different taxonomic groups i.e. angiosperms, gymnosperms and pteridophytes were collected and preserved in the form of herbarium after drying in the folds of blotting sheets. Plants were identified and enumerated along with their Botanical name, Family name, Local name, Ayurvedic name, Unani name and Siddha name. A checklist has been prepared after comparing with the existing literature of Ayurveda, Unani, and Siddha systems of medicine.

Keywords: Himachal Pradesh, Siddha System of Medicine, Herbarium.

Introduction

India has six recognized systems of medicine i.e. Ayurveda, Siddha, Unani, Yoga, Naturopathy and Homoeopathy. Because of diverse climatic conditions, Himachal Pradesh is one of the richest biodiversity areas. It is known to supply a very large proportion of the medicinal plant requirements of India (80% of Ayurvedic drugs, 46% of Unani drugs and 33% of Allopathic drugs). It is located in the Western Himalaya region between 30° 22' N to 33° 12' N and 75° 45' E to 79° 04' E, extends over an area of about 55,673 Sq. Km. Maximum rural populations of the world including India are dependent on these systems of medicine for their health care. Ayurveda is the oldest system of medicine and native to India, but Unani system of medicine originated in Greece and has been introduced by the Arabs in India. Ayurvedic system of medicine is based on three dosas (Vata, pitta and Kapha). The body will be healthy, if all dosas exist in equal quantities. The Unani medicine is based on the "humoral theory". Disease occurs whenever the balance of humors is disturbed (Joshi and Joshi, 2013; Kumar, 2014a - h). Siddha system of medicine is practiced in south India especially in the state of Tamil Nadu. In this system, diagnosis is based on examination of Nadi (pulse), Kan (eyes), Swara (voice), Sparisam (touch), Varna (colour), Na (tongue), Mala (faeces) and Neer (urine) [Ravishankar and Shukla, 2007].

Tehsil Joginder Nagar lies between 31° 50' N and 76° 45' E in Mandi district of Himachal Pradesh. It is situated in the way of Pathankot to Mandi at National Highway No. 20. Area of Joginder Nagar lies at 900 to 2800 meters above mean sea level and its maximum area are covered under forest. It is the repository of floral biodiversity due to variable climatic conditions. Such biodiversity supports the livelihood of people who live in the remote and backward area of tehsil Joginder Nagar. These people directly or indirectly depend on biodiversity for food, fuel, fodder, timber, and medicines etc. Due to population explosion, dependency on biodiversity has increased for various purposes. Some species of plants are

in the verge of disappearing from the earth due to over exploitation, habitat destruction and changes in climatic conditions. Various attempts have been carried out on floristic diversity and medicinally important plants of Himachal Pradesh including Joginder Nagar [Atkinson (1882); Collett (1902); Hooker (1872-1897); Kumar, (2014a - h)], but many biodiversity rich areas are still unexplored. So, there is a need to explore important biological resources for their conservation. Keeping in view the importance of floristic diversity, the present study was carried out to assess and document the information of the study area.

Material and Methods

The field surveys were conducted in April 2012 to December 2013 in different areas of Tehsil Joginder Nagar. The plant specimens collected during field visits were identified and preserved in the form of herbarium after drying in the folds of blotting sheets. The herbarium was prepared after treating the collected plant specimens with 2% mercuric chloride solution to provide protection against insects and fungal attack. The collected specimens were identified with the help of the various flora and books (Sood et. al, 2009; Collett, 1902; Polunin and Stainton, 1984; Chatterjee and Pakrashi, 1991; Chauhan, 1999; Ambasta, et.al, 1986; Prajapati et. al., 2003) and carefully matched with the specimens kept at herbarium of Botanical Survey of India, Dehradun. All the plant specimens were arranged alphabetically and are enumerated along with their Botanical name, Family name, Local name, Ayurvedic name, Unani name and Siddha name (Khare, 2007). Local name of the collected plant specimens were recorded by interview and discussion with the local people.

Results

The present study records 100 plant species belonging to 57 families (Table.1). Out of these 55 belong to angiosperms, one gymnosperm and one pteridophyte. Among the dominant families, Fabaceae represented with maximum number of species i.e. 6; followed by Cucurbitaceae and Rutaceae with four species each; Apiaceae, Apocynaceae, Caesalpinaceae, Euphorbiaceae, Lauraceae, Malvaceae, Mimosaceae and Poaceae with three species each; Acanthaceae, Alliaceae, Amaranthaceae, Anacardiaceae, Asclepiadaceae, Asteraceae, Lamiaceae, Liliaceae, Moraceae, Nyctaginaceae, Oleaceae, Solanaceae, Sterculiaceae and Zingiberaceae with two species each and remaining 30 families were with single species only (Fig. 1). Out of 55 angiosperm's families (86 genera), 47 families (74 genera) belong to Dicotyledons and 8 (12 genera) belong to Monocotyledons. The plant specimens were collected during flowering in order to facilitate the process of identification. All collected species of plant have medicinal value and are being used in Ayurveda, Unani and Siddha Systems of Medicine.

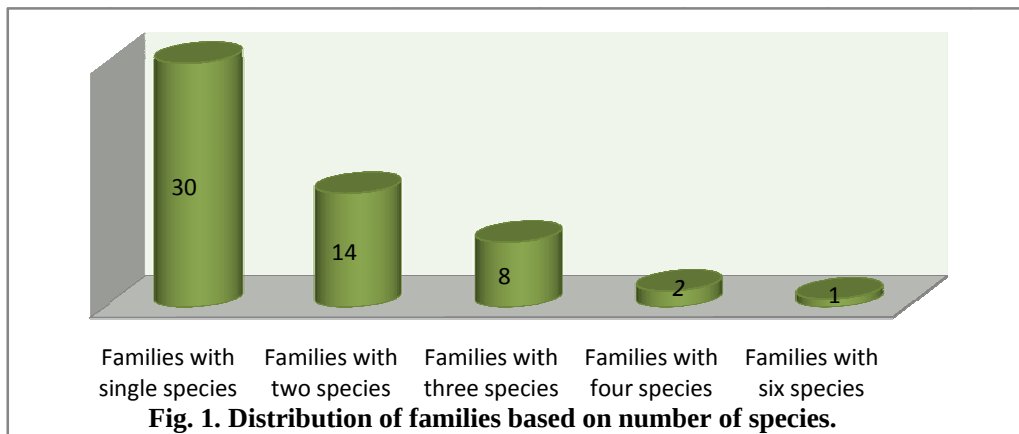


Table 1. List of medicinal plants available at tehsil Joginder Nagar, Distt. Mandi, H.P.

S.N.	Botanical Name(Family)	Local Name	Ayurvedic Name	Unani Name	Siddha Name
1	<i>Abelmoschus esculentus</i> (Linn.) Moench (Malvaceae)	Bhindi	Bhindaka	Baamiyaa	Vendai
2	<i>Abies webbiana</i> Lindl. (Pinaceae)	Talispatra	Taalisapatra	Taalisapattar	Taalispatri
3	<i>Abrus precatorius</i> Linn. (Papilionaceae; Fabaceae)	Rati, Gunj	Gunjaa, Raktikaa	Ghungchi, Ghamchi	Kunri
4	<i>Acacia concinna</i> DC. (Mimosaceae)	Shikakai	Saptalaa, Shitalaa	Shikaakaai, Kharunb Nabti	Seekai, Sigakai
5	<i>Achyranthes aspera</i> Linn. (Amaranthaceae)	Puthkanda	Apaamaarga, Chirchitaa	Chirchitaa	Naayuruvi
6	<i>Acorus calamus</i> Linn. (Araceae)	Bare, Bach	Vachaa, Ugragandhaa	Waj-e-Turki, Waj	Vasambu
7	<i>Adhatoda vasica</i> Nees (Acanthaceae)	Bansa, Basti, Basunti,	Vaasaka, Simhaparni	Arusaa	Aadaathodai
8	<i>Adiantum capillus-veneris</i> Linn. (Adiantaceae)	Hansraj or Hanspadi,	Hansaraaja, Hansapadi	Parsiaavashaan	Seruppada
9	<i>Aegle marmelos</i> (L.) Correa ex Roxb. (Rutaceae)	Bel	Bilva, Shriphala	Bael	Vilvam, Koovilam
10	<i>Albizia lebeck</i> (Linn.) Willd. (Mimosaceae)	Siris	Shirisha, Shitapushpa	Siras	Vaagei
11	<i>Allium cepa</i> Linn. (Alliaceae)	Piyaz	Palaandu, Durgandh	Piyaaz	Venkaayam
12	<i>Allium sativum</i> Linn. (Alliaceae)	Lasun, Lasan	Lashuna, Rasona	Seer, Lahsun	Ullippoandu, Vellaippondu
13	<i>Aloe barbadensis</i> Mill. (Liliaceae)	Kawar, Ghi-Kawar	Kumaari, Kumaarikaa	Gheekwaar, Sibr	Sotru Kattrazhai, Kumaari. Moosaambaram (dried juice)
14	<i>Alstonia scholaris</i> R. Br. (Apocynaceae)	Saptarni	Saptaparna, Saptaparni	Chhaatim, Kaasim	Ezhilampalai, Mukkampalai
15	<i>Alternanthera sessilis</i> DC. (Amaranthaceae)	Kanchari, Lohari	Matsyaakshi, Matsyaakshika	Machhechhi	Ponnonkanni keera
16	<i>Ambroma augusta</i> Linn. (Sterculiaceae)	Ulatkambal, Olatkambal	Pishaacha, Kaarpaasa, Pivari	Ulat-kambal	Sivapputtuti
17	<i>Amomum subulatum</i> Roxb. (Zingiberaceae)	Bari-elayachi	Sthula-elaa, Bhadraa	Heel Kalaan, Qaaqule Kubaar	Peria Elam, Kattu Elam, Beraelam
18	<i>Anacyclus pyrethrum</i> DC. (Asteraceae)	Akarkara	Aakaarakarabha, Aakallaka	Aaqarqarhaa	Akkiraakaaram
19	<i>Andrographis paniculata</i> Wall. ex Nees (Acanthaceae)	Kalmegh	Kaalmegha, Bhuunimba, Kalpanaatha	Kiryaat	Nilavembu
20	<i>Apium leptophyllum</i> (Pers.) Muell. Ex Benth. (Apiaceae)	Jungli Ajwain, Ajmuda	Ajmodaa, Dipyaka	Ajmod, Karafs-e-Hindi	Omam
21	<i>Aristolochia indica</i> Linn. (Aristolochiaceae)	Isharmul	Ishvari, Gandhnaakuli, Naagadamani, Arkamuula	Zaraavand-Hindi	Adagam
22	<i>Asparagus racemosus</i> Willd. (Liliaceae)	Satawar, Sansarpali	Shataavari, Shatmuuli	Sataavar	Thanneervittan kizhangu, Sataavari Kizhangu
23	<i>Bacopa monnieri</i> (Linn.) Penn. (Scrophulariaceae)	Jal-nim, Jal-brahmi	Braahmi, Aindri, Nirbraahmi	Brahmi	Piramivazhukkai, Neerbrami
24	<i>Benincasa hispida</i> (Thunb.) Cong. (Cucurbitaceae)	Dhuda-Petha, Pethu	Kuushmaanda, Kuushmaandaka	Pethaa, Mahdabaa, Kaddue-Roomi	Ven-poosani, Saambalpushani
25	<i>Berberis aristata</i> DC.	Kashmal,	Daaruharidraa	Daarhald. Rasaut	Marmanjal

	(Berberidaceae)	Panjolu		(extract). Zarishk (fruit)	
26	<i>Boerhaavia diffusa</i> Linn. (Nyctaginaceae)	It-sit	Rakta-punarnavaa, Punarnavaa	Itsit, Bishkhaparaa	Mookkirattai
27	<i>Butea monosperma</i> (Lam.) Taub. (Papilionaceae; Fabaceae)	Palas	Paalasha, Kimshuka, Raktapushpaka	Dhaak, Samagh, Kamarkas	Palasam, Purasus
28	<i>Callicarpa macrophylla</i> Vahl. (Verbenaceae)	Dahimal, Dussah	Priyangu, Priyangukaa, Priyaka, Gandhphali	Habb-ul-Mihlb	Gnazhal, Chokkala
29	<i>Calotropis procera</i> (Ait.) R. Br. (Asclepiadaceae)	Ak	Alarka, Surya, Arkaparna	Aakh, Madaar, Ashar	Vellerukku, Erukku
30	<i>Cannabis sativa</i> Linn. (Cannabinaceae)	Bhang	Vijayaa, Bhangaa	Bhang, Charas, Qinnab	Ganja
31	<i>Capsicum annuum</i> Linn. (Solanaceae)	Lal Mirch	Raktamaricha, Lankaa, Katuviraa	Mirch, Filfil-e- Ahmar, Filfil-e-Surkh, Surkh Mirch	Milagay
32	<i>Carica papaya</i> Linn. (Caricaceae)	Papita, Papeeta	Erاند-karkati, Papitaa	Papitaa Desi	Pappaali, Pappayi
33	<i>Cassia fistula</i> Linn. (Caesalpiniaceae)	Aahali, Amaltas	Aaragvadha, Kritamaala	Amaltaas, Khyaarshambar	Sarakkonrai
34	<i>Cassia occidentalis</i> Linn. (Caesalpiniaceae)	Chakramard, Chakunda	Kaasamarda, Kaasaari	Kasondi	Paeyaaavarai, Thagarai
35	<i>Cassia tora</i> Linn. (Caesalpiniaceae)	Aelu, Chhoti-reli	Chakramarda, Chakri	Penwaad Taarutaa	Ushittgarai
36	<i>Cedrus deodara</i> (Roxb.) Loud. (Pinaceae)	Devdar	Devadaaru, Suradruma, Daaruka	Deodaar	Thevathaaram
37	<i>Celastrus paniculatus</i> Willd. (Celastraceae)	Malkangani	Jyotishmati, Maalkaanguni	Maalkangani	Vaaluluvai
38	<i>Chenopodium album</i> Linn. (Chenopodiaceae)	Bathu	Vaastuuka	Bathuaa, Baathu	Paruppukeerai
39	<i>Cinnamomum camphora</i> (Linn.) Nees & Eberm. (Lauraceae)	Kapur	Karpura, Ghanasaara	Kaafloor	Indu, Karupporam
40	<i>Cinnamomum tamala</i> Nees & Eberm (Lauraceae)	Gudpatraj, Tejpatra	Tejapatra, Patra, Patraka	Saleekhaa, Saazaj Hindi	Lavangappattiri
41	<i>Cinnamomum zeylanicum</i> Blume (Lauraceae)	Dalchini	Tvak, Daaruchini	Daarchini (bark)	Elavangappattai
42	<i>Cissampelos pareira</i> Linn. (Menispermaceae)	Bhatindu	Paathaa, Ambashthaa, Varatiktaaa	Paathaa	Paadakkizhangu, Appatta
43	<i>Citrus limon</i> (Linn.) Burm.f. (Rutaceae)	Nimbu	Nimbu, Nimbuka	Utraj	Periya elumuchhai
44	<i>Citrus maxima</i> (Burm.) Merrill (Rutaceae)	Chakotra	Madhukarkatikaa	Chakotra	Pambalimasu
45	<i>Cordia myxa</i> Roxb. non Linn. (Boraginaceae)	Lasura, Lasyade	Shleshmaataka, Shelu, Lisodaa	Sapistaan, Lasodaa	Naruvili
46	<i>Coriandrum sativum</i> Linn. (Apiaceae)	Dhaniya	Dhaanyaka, Kustumburu, Dhaanyeyaka, Dhanika	Kishneez	Kotthamalli
47	<i>Cucumis sativus</i> Linn. (Cucurbitaceae)	Khira, Kheera	Trapusha, Traapusha, Trapushi	Khiyaar, Khiraa	Vellarikkai
48	<i>Curculigo orchoides</i> Gaertn. (Amaryllidaceae; Hypoxidaceae)	Musli	Taalmuuli, Taalpatri, Krishna Mushali	Musli Siyaah	Nilappanan kizhangu
49	<i>Curcuma longa</i> Linn. (Zingiberaceae)	Haldi	Haridraa, Priyaka, Haridruma, Kshanda	Zard Chob	Manjal
50	<i>Cynodon dactylon</i> Pers. (Poaceae)	Drubh	Duurvaa, Bhaargavi, Shatvalli, Shatparvaa	Duub	Arugampallu

51	<i>Dalbergia sissoo</i> Roxb ex DC. (Papilionaceae; Fabaceae)	Talhi, Seesham	Shimshapaa, Krishnashimshapaa, Picchilaa	Seesham	Irupoolai
52	<i>Datura metel</i> Linn. (Solanaceae)	Kala Dhatura, Dhattura	Dhattuura, Dhuurta, Dhastura, Unmatta	Dhaturaa	Oomatthai, Karuvomatthai
53	<i>Dioscorea bulbifera</i> Linn. (Dioscoreaceae)	Peela Khetha, Khitha, Tardi	Vaaraahi, Vaaraahikanda, Grsthi, Banaaalu	Baraahikand	Kodi-kilangu, Pannu-kilangu
54	<i>Eclipta alba</i> (Linn.) Hassk. (Asteraceae)	Bhringraj	Bhringaraaja, Bhringa, Bhringaja	Bhangraa	Karisalaankanni
55	<i>Embelia ribes</i> Burm.f. (Myrsinaceae)	Viavidang, Vidang	Vidanga, Krmighna, Krmihara, Krmiripu	Baobarang, Barang Kaabuli	Vaayuvidangam
56	<i>Emlica officinalis</i> Gaertn. (Euphorbiaceae)	Ambla	Aaamalaki, Aaamalaka, Dhaatri, Kaayasthaa	Aamalaa, Amlaj	Nellikkaai, Nelli
57	<i>Eriobotrya japonica</i> Lindl. (Rosaceae)	Loquat, Lokat	Lottaaka	Lokaat	Ilakotta, Nokkotta (Tamil)
58	<i>Euphorbia hirta</i> Linn. (Euphorbiaceae)	Dudhli, Dudhi	Dudhi, Dudhikaa, Vikshirini	Dudhi Khurd	Amman pachharisi
59	<i>Ficus racemosa</i> Linn. (Moraceae)	Gular, Umare	Udumbara, Sadaaphala	Anjir-e-Aadam, Anjir-e-Ahmak, Gular	Atthi
60	<i>Ficus religiosa</i> Linn. (Moraceae)	Pipal, Peepal	Ashvattha, Bodhidru, Bodhivrkisha, Peepal	Peepal	Arasu, Ashvatham
61	<i>Foeniculum vulgare</i> Mill. (Apiaceae)	Saunf	Mishreyaa, Mishi, Shatapushpaa	Baadiyaan, Saunf	Sombu
62	<i>Fumaria parviflora</i> Lam. (Papaveraceae; Fumariaceae)	Pitpapra	Parpata, Parpataka, Varatikta	Shaahtaraa	Thura
63	<i>Hemidesmus indicus</i> (L.) R. Br. (Asclepiadaceae)	Anantmul	Shveta Saarivaa, Anantmuula	Ushbaa Hindi	Nannaari, Suganthipala
64	<i>Hibiscus abelmoschus</i> Linn. (Malvaceae)	Kasturi Bhindi	Lataakasturi, Lataakasturikaa	Mushkdaanaa	Kasturi-vendai
65	<i>Hibiscus rosa-sinensis</i> Linn. (Malvaceae)	China Rose, Japa	Japaa, Javaa, Odrapushpa, Rudrapushpa, Arunaa	Gul-e-Gurhal	Semparuthi
66	<i>Holarrhena antidysenterica</i> (Linn.) Wall. (Apocynaceae)	Keor, Kurchi	Kutaja, Girimallikaa, Vatsabija (seed), Kurchi (bark)	Inderjo talkh, Teewaaj-e- Khataai.	Kudasappaalai-pattai, -vidai (bark, seed)
67	<i>Hordeum vulgare</i> Linn. (Poaceae)	Jau, Jao	Yava, Hayeshtha, Shuka-dhaanya	Barley, Jao Shaeer	Yavam, Saambaluppu (ash)
68	<i>Impatiens balsamina</i> Linn. (Balsaminaceae)	Taur, Tayur	Tarini	Gul-menhdi	Kasittumbai
69	<i>Jasminum grandiflorum</i> Linn. (Oleaceae)	Malti, Chameli, Jati	Jaati, Jaatikaa, Jaatimalli	Yaasmin	Manmadabanam, Mullai, Padar-malligai, Pichi, Malli
70	<i>Jasminum sambac</i> (Linn.) Ait. (Oleaceae)	Banmallika	Mallikaa, Madayanti, Madyantikaa	Mograa	Malligai
71	<i>Juglans regia</i> Linn. (Juglandaceae)	Akhrot, Khoar	Akshoda, Akshodaka, Akshota	Akhrot	Akrottu
72	<i>Kalanchoe pinnata</i> (Lam.) Pers. (Crassulaceae)	Patharchat	Parnabija, Pattharchuur, Pattharchat	Zakhm-e-Hayaat	Runakalli
73	<i>Lagenaria siceraria</i> (Mol.) Standley (Cucurbitaceae)	Laucki	Katu-tumbi, Tumbini, Ikshavaaku	Kaddu-e-talkh	Suraikai
74	<i>Linum usitatissimum</i> Linn. (Linaceae)	Alsi	Atasi, Nilapushpi	Kattan	Ali, Virai, Sirrali (Seed)
75	<i>Mallotus philippensis</i> Muell. – Arg. (Euphorbiaceae)	Kambal, Kaambal	Kampillaka, Kampilla	Kamilla, Kambilaa	Kapli, Kalupatti
76	<i>Mangifera indica</i> Linn. (Anacardiaceae)	Aam, Amb	Aamra, Amb, Rasaal, Sahakaar	Aam, Ambaj	Manga, Mau, Mamaram (bark),

					Mangottai Paruppu (seed)
77	<i>Melia azedarach</i> Linn. (Meliaceae)	Drek	Mahaanimba, Ramyaka, Dreka	Bakaayan	Malaivembu
78	<i>Mimosa pudica</i> Linn. (Mimosaceae)	Lajwanti, Chui-mui	Lajjaalu, Laajavanti, Namaskaari	Chhuimui, Sharmili, Laajwanti	Thottalsurungi
79	<i>Mirabilis jalapa</i> Linn. (Nyctaginaceae)	Gulabansh	Trisandhi	Gul-abbaas	Andhimalligai
80	<i>Momordica charantia</i> Linn. (Cucurbitaceae)	Karela	Kaaravellaka, Kaaravella, Kaathilla, Sushaavi	Karelaa	Paakal, Paharkai
81	<i>Moringa oleifera</i> Lam. (Moringaceae)	Sunaney	Madhu Shigru, Sigra, Shobhaanjana	Sahajan	Murungai
82	<i>Mucuna prurita</i> Hook. (Papilionaceae; Fabaceae)	Dragal	Aatmaguptaa, Kapikacchuu	Konchh	Poonikkaali
83	<i>Murraya koenigii</i> (Linn.) Spreng. (Rutaceae)	Gandla, Kadi- Patta	Surabhini-nimba	Karipattaa	Karuveppilei, Karivempu, Kattuveppilei
84	<i>Musa paradisiaca</i> Linn. (Musaceae)	Kela	Kadali, Rambhaa, Sakrtphala	Kelaa, Mouz	Vaazhai
85	<i>Myrica esculenta</i> Buch.-Ham. (Myricaceae)	Kaphal	Katphala, Kushbhikaa, Shriparnikaa	Kaayaphal	Marudam
86	<i>Nerium indicum</i> Mill. (Apocynaceae)	Kaner	Karavira, Viraka, Ashvamaaraka	Kaner Safed, Diflaa, Samm-ul-maar, Khar-zaharah	Arali, Alari, Aatrulari, Karaviram
87	<i>Ocimum basilicum</i> Linn. (Lamiaceae)	Bhabri	Barbari, Tuvuri, Kharpushpa, Baabui Tulasi	Faranjmishk	Tiruneetruppachilai
88	<i>Ocimum sanctum</i> Linn. (Lamiaceae)	Tulsi	Tulasi, Surasaa, Surasa	Tulasi	Tulasi, Nalla-Tulasi
89	<i>Oryza sativa</i> Linn. (Poaceae)	Dhan	Shaali, Vrihidhaanya, Tandula, Nivara	Biranj Saathi	Nell
90	<i>Oxalis corniculata</i> Linn. (Oxalidaceae)	Malori	Chaangeri, Amlapatrikaa, Amlikaa	Ambutaa bhaaji, Amutaa saag	Puliyarai
91	<i>Papaver somniferum</i> Linn. (Papaveraceae)	Afyum	Ahiphena, Aaphuuka. Post-daanaa (seed)	Afyum. Tukhm- ekhashkhaash (seed)	Kasakasa (seeds)
92	<i>Phaseolus mungo</i> Linn. non Roxb. & auct. (Papilionaceae; Fabaceae)	Mash	Maasha	Urd-Siyaah	Ulundhu
93	<i>Pinus roxburghii</i> Sarg. (Pinaceae)	Chir	Sarala, Pita-vriksha, Oleo-resin – Shriveshtaka, Gandh-Birojaa	Sanobar-ul-Hindi. Oleoresin – Gandh-Bihrojaa, Qinn,Berzad	Simaidevadaru
94	<i>Piper longum</i> Linn. (Piperaceae)	Peeper, Pippali	Pippali, Maagadhi, Maagadha, Maagadhaa	Filfil Daraaz, Daarfilfil	Thippili, Arisi thippili. Thippiliver (root)
95	<i>Pistacia integerrima</i> Stewart ex Brandis (Anacardiaceae)	Karkatshringi	Karkatashringi, Shringi, Karkatashringikaa	Kaakraasingi, Kakar	Karkatagasingi
96	<i>Plumbago zeylanica</i> Linn. (Plumbaginaceae)	Chitrak	Chitraka, Agni, Vahni	Sheetraj Hindi	Chittramoolam
97	<i>Portulaca oleracea</i> Linn. (Portulacaceae)	Kulfa, Chlai	rihat Lonikaa, Lonaa, Loni, Ghoddhika, Ghotikaa	Khurfaa, Kulfaa	Pulli-keerai, Paruppukirai
98	<i>Psoralea corylifolia</i> Linn. (Papilionaceae; Fabaceae)	Baabchi, Bakuchi	Somaraaji, Somavalli, Soma, Baakuchi	Baabchi, Bakuchi	Karpoogaarisi
99	<i>Pterospermum acerifolium</i> Willd. (Sterculiaceae)	Kanak Champa	Muchukunda, Muchakunda	Gul-e-Muchkun	Vennangu
100	<i>Randia dumetorum</i> Poir. (Rubiaceae)	Rada	Madana, Chhardana, Pindi, Shalayaka, Vishapushpaka	Mainphal, Jauz-ul- Qai	Marukkaarakai, Madkarai

Discussion

Plant biodiversity is one of the major resources that fulfill the needs of human beings i.e food, timber and medicines etc. Plants provide the predominant ingredients of medicine in most of the medicine systems. Himachal Pradesh has variety of medicinal important floral diversity. About 70-95% populations of developing countries are using traditional medicines for their healthcare while as 77 % population of rural India use the firewood for cooking (Kumar, 2014a - h). The objective of this study is to provide comprehensive information on medicinal important floral diversity and distribution of the plants in the areas of tehsil Joginder Nagar.

Conclusion

The present study provides information about the distribution of medicinal important floral diversity of Tehsil Joginder Nagar. During the course of study, 100 plant species belonging to 57 families were recorded. People of rural areas totally depend on biodiversity for food, fuel, fodder, timber, medicines and various other purposes. Due to population explosion, urbanization, over exploitation and habitat destruction, the number of important plant species is decreasing rapidly and even some in the verge of disappearing from the earth. The selected study area shows great medicinally important floral diversity. So, there is need to explore and collect the information of floristic diversity of unexplored areas to conserve the natural biodiversity.

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